



CERTIFICATE NUMBER 19-HG1839610-1-PDA

EFFECTIVE DATE 05-Jun-2019

EXPIRATION DATE 28-May-2024

ABS TECHNICAL OFFICE Hamburg Engineering Services

CERTIFICATE OF

Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

ABB STOTZ KONTAKT GMBH

located at

EPPELHEIMER STR. 82, HEIDELBERG, GERMANY, D-69123

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Motor Controller

Model MS132-xxx, MO132-xxx, MS132-xxxK

This Product Design Assessment (PDA) Certificate remains valid until 28-May-2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping

Efstratios Maliatsos
Engineer/ Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

ABB STOTZ KONTAKT GMBH

EPPELHEIMER STR. 82

HEIDELBERG

Germany D-69123

Telephone: +49-6221-701 1336

Fax: +49-6221-701 1112

Email: dirk.meyer@de.abb.com

Web: www.abb.com

Tier: 2 - PDA Issued

Product: Motor Controller

Model: MS132-xxx, MO132-xxx, MS132-xxxK

Intended Service:

Manually operated electric motor controller.

Description:

3-pole, manually operated circuit breakers with overload (only model MS132-xxx and MS132-xxxK), short circuit and phase failure protection. Additional auxiliary switch modules HKF1-xx/ HKF1-xxK / HK1-xx/ HK1-xxK/CK1-xx, signal contact modules SK1-xx/ SK1-xxK, undervoltage tripping modules UA1-xxx and over current tripping modules AA1-xxx.

Rating:

Working Current Range: 0.10 - 32A.

Rated Voltage: 690 AC.

Degree of Protection: IP20.

Ambient air Temperature (Operation):

- Open – compensated: -25°C to +60°C
- Open : -25°C to +70°C
- Enclosed(IB132) : 0°C to +40°C

Service Restriction:

Unit certification is not required for this product. If the manufacturer or purchaser's request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2. Each particular application and the individual set points are to be specifically approved in conjunction with the relevant system in which the units are being used.

Notes/Drawing/Documentation:

Drawing No. BMP Testspec V2 3 05 06 2018, Test Specification for Ship-Approval Tests, Revision: -, Pages: 16

Drawing No. 00901-CB2017CQC-0077946, Test Report, IEC 60947-5-1, 13/12/2017, Shanghai Testing & Inspection Institute for Electrical Equipment (STIEE), Revision: -, Pages: 71

Drawing No. CN42163, CB Test Certificate, 21 Dec 2017, IEC 60947-5-1, China Quality Certification Centre, Revision: -, Pages: 1

Drawing No. 00901-CB2017CQC-077947 Test Report, IEC 60947-5-1, Part 5, 13 Dec 2017, Shanghai Testing & Inspection Institute for Electrical Equipment (STIEE), Revision: -, Pages: 59

Drawing No. CB_HKF1_CN42162, CB Test Certificate No. CN 42162- 21 Dec. 2017, Revision: -, Pages: -

Drawing No. CB_MS132-K_CN42365, CB Test Certificate No. CN42365- Motor Protection Circuit-Breakers, Revision: -, Pages: -

Drawing No. 00901-CB2017CQC-077432-1, Test Report, IEC 60947-2, Part 2, 29 Dec 2017, Shanghai Testing & Inspection Institute for Electrical Equipment (STIEE), Revision: -, Pages: 317

Drawing No. 00901-CB2017CQC-077432-2, Test Report, IEC 60947-4-1, Contractors and motor starters, 29 Dec 2017, Shanghai Testing & Inspection for Electrical Equipment (STIEE), Revision: -, Pages: 156

Drawing No. Dielectric_after_Environmental_D2018015, Test Protocol- Dielectric Voltage Withstand Test, Revision: -, Pages: 1

Drawing No. MS132-K_GW2017001, Test Protocol- Glow Wire Test, Revision: -, Pages: 1

Drawing No. MS132K_BG1_1sam300102_02, DWG- Exploded View Device Comp. MS132-K BG1, Revision: -, Pages: 1

Drawing No. MS132K_BG1_1sam300102_04, DWG- Exploded View Base-Middle Housing Sub-Asm. MS 132-K BG1, Revision: -, Pages: 1

Drawing No. MS132K_BG1_1sam300102_05, DWG- Exploded Base Housing Asm. MS132-K BG1, Revision: -, Pages: 1

ABB STOTZ KONTAKT GMBH

EPPELHEIMER STR. 82

HEIDELBERG

Germany D-69123

Telephone: +49-6221-701 1336

Fax: +49-6221-701 1112

Email: dirk.meyer@de.abb.com

Web: www.abb.com

Tier: 2 - PDA Issued

Pages: 1

Drawing No. MS132K_BG2_1sam300102_01, DWG- Exploded View Device Compl. MS132-K BG2, Revision: -, Pages: 1

Drawing No. MS132K_BG2_1sam300102_03, DWG- Exploded Base Housing Asm. MS132-K BG2, Revision: -, Pages: 1

Drawing No. MS132K_BG2_1sam300102_06, DWG- Exploded View Tripping Unit MS132-K, Revision: -, Pages: 1

Drawing No. 18-10034, DAKKS- Test Report, Environmental Test, 5 Jun 2018, paconsult GmbH, Environmental Testing Laboratory, Revision: -, Pages: 32

Drawing No. Plastics Datasheet middel and botoom Housing MS132-K Wellamid 6600-PA66-GV20 HWV0CP, UL Certification No. E63957- Datasheet Middel & Botoom Housing MS132-K Wellamid 6600-PA66-GV20

HWV0C, Revision: -, Pages: 1

Drawing No. Push-in catalog 1SBC100212C0201, MS132-K Manual Motor Starters with Push-in Spring Terminals, Revision: -, Pages: 7

Drawing No. Thermal_Tripping_TT2018011, Test Protocol- Thermal Tripping Test, Revision: -, Pages: 1

Terms of Validity:

This Product Design Assessment (PDA) Certificate 19-HG1839610-1-PDA, dated 05/Jun/2019 remains valid until 28/May/2024 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

STANDARDS

ABS Rules:

2019 ABS Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/1.7, 4-8-3/1.11.1, 4-8-3/1.17, 4-8-3/5.3.3, 4-8-3/5.7.1, 4-8-3/5.7.2, 4-9-8/13.1

2019 ABS Marine Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/1.7, 4-8-3/1.11.1, 4-8-3/1.17, 4-8-3/5.3.3, 4-8-3/5.7.1, 4-8-3/5.7.2, 4-9-9/13.1

2019 ABS Mobile Offshore Drilling Units Rules 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-3-1/11, 4-3-1/15, 4-3-1/17, 6-1-7/9.15.1, 6-1-7/9.15.2

2019 ABS Mobile Offshore Units Rules 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-3-1/11, 4-3-1/15, 4-3-1/17, 6-1-7/9.15.1, 6-1-7/9.15.2

National:

NA

International:

IEC/EN 60947-2 Ed. 5.0 (2016)

IEC/EN 60947-5-1 Ed. 4 (2018)

Government:

NA

ABB STOTZ KONTAKT GMBH

EPPELHEIMER STR. 82

HEIDELBERG

Germany D-69123

Telephone: +49-6221-701 1336

Fax: +49-6221-701 1112

Email: dirk.meyer@de.abb.com

Web: www.abb.com

Tier: 2 - PDA Issued

EUMED:

NA

OTHERS:

NA



CERTIFICATE NUMBER 18-HG1839610-1-PDA-DUP

EFFECTIVE DATE 12-Mar-2020

EXPIRATION DATE 28-May-2024

ABS TECHNICAL OFFICE London Engineering Office

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

ABB XINHUI LOW VOLTAGE SWITCHGEAR COMPANY LTD
located at
NO. 9, NORTH SANHE ROAD, XINHUI DISTRICT, JIANGMEN CITY, GUANGDONG
PROVINCE, CHINA, 529100

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Motor Controller

Model MS132-xxx, MO132-xxx, MS132-xxxK

This Product Design Assessment (PDA) Certificate remains valid until 28-May-2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping


Steve Brincat, Managing Principle Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

ABB XINHUI LOW VOLTAGE SWITCHGEAR COMPANY LTD

NO. 9, NORTH SANHE ROAD

XINHUI DISTRICT

JIANGMEN CITY GUANGDONG PROVINCE

China 529100

Telephone: +86 750 633 4646

Fax: + 86 750 667 7526

Email: donna-qiuhong.dong@cn.abb.com

Web: <http://www.abb.com.cn>

Tier: 5 - Unit Certification Required

Product: Motor Controller

Model: MS132-xxx, MO132-xxx, MS132-xxxK

Intended Service:

Manually operated electric motor controller.

Description:

3-pole, manually operated circuit breakers with overload (only model MS132-xxx and MS132-xxxK), short circuit and phase failure protection. Additional auxiliary switch modules HKF1-xx/ HKF1-xxK / HK1-xx/ HK1-xxK/CK1-xx, signal contact modules SK1-xx/ SK1-xxK, undervoltage tripping modules UA1-xxx and over current tripping modules AA1-xxx.

Rating:

Working Current Range: 0.10 - 32A.

Rated Voltage: 690 AC.

Degree of Protection: IP20.

Ambient air Temperature (Operation):

- Open – compensated: -25°C to +60°C
- Open : -25°C to +70°C
- Enclosed (IB132) : 0°C to +40°C

Service Restriction:

Unit certification is not required for this product. If the manufacturer or purchaser's request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

1. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
2. Each particular application and the individual set points are to be specifically approved in conjunction with the relevant system in which the units are being used.

Notes/Drawing/Documentation:

Drawing No. BMP Testspec_V2_3_05_06_2018, Test Specification for Ship-Approval Tests, Revision: -, Pages: 16

Drawing No. 00901-CB2017CQC-0077946, Test Report, IEC 60947-5-1, 13/12/2017, Shanghai Testing & Inspection Institute for Electrical Equipment (STIEE), Revision: -, Pages: 71

Drawing No. CN42163, CB Test Certificate, 21 Dec 2017, IEC 60947-5-1, China Quality Certification Centre, Revision: -, Pages: 1

Drawing No. 00901-CB2017CQC-077947 Test Report, IEC 60947-5-1, Part 5, 13 Dec 2017, Shanghai Testing & Inspection Institute for Electrical Equipment (STIEE), Revision: -, Pages: 59

Drawing No. CB_HKF1_CN42162, CB Test Certificate No. CN 42162- 21 Dec. 2017, Revision: -, Pages: -

Drawing No. CB_MS132-K_CN42365, CB Test Certificate No. CN42365- Motor Protection Circuit-Breakers, Revision: -, Pages: -

Drawing No. 00901-CB2017CQC-077432-1, Test Report, IEC 60947-2, Part 2, 29 Dec 2017, Shanghai Testing & Inspection Institute for Electrical Equipment (STIEE), Revision: -, Pages: 317

Drawing No. 00901-CB2017CQC-077432-2, Test Report, IEC 60947-4-1, Contractors and motor starters, 29 Dec 2017, Shanghai Testing & Inspection for Electrical Equipment (STIEE), Revision: -, Pages: 156

Drawing No. Dielectric_after_Environmental_D2018015, Test Protocol- Dielectric Voltage Withstand Test, Revision: -, Pages: 1

Drawing No. MS132-K_GW2017001, Test Protocol- Glow Wire Test, Revision: -, Pages: 1

Drawing No. MS132K_BG1_1sam300102_02, DWG- Exploded View Device Comp. MS132-K BG1, Revision: -, Pages: 1

Drawing No. MS132K_BG1_1sam300102_04, DWG- Exploded View Base-Middle Housing Sub-Asm. MS 132-K BG1, Revision: -, Pages: 1

ABB XINHUI LOW VOLTAGE SWITCHGEAR COMPANY LTD

NO. 9, NORTH SANHE ROAD

XINHUI DISTRICT

JIANGMEN CITY GUANGDONG PROVINCE

China 529100

Telephone: +86 750 633 4646

Fax: + 86 750 667 7526

Email: donna-qiu hong.dong@cn.abb.com

Web: http://www.abb.com.cn

Tier: 5 - Unit Certification Required

Drawing No. MS132K_BG1_1sam300102_05, DWG- Exploded Base Housing Asm. MS132-K BG1, Revision: -, Pages: 1

Drawing No. MS132K_BG2_1sam300102_01, DWG- Exploded View Device Compl. MS132-K BG2, Revision: -, Pages: 1

Drawing No. MS132K_BG2_1sam300102_03, DWG- Exploded Base Housing Asm. MS132-K BG2, Revision: -, Pages: 1

Drawing No. MS132K_BG2_1sam300102_06, DWG- Exploded View Tripping Unit MS132-K, Revision: -, Pages: 1

Drawing No. 18-10034, DAKKS- Test Report, Environmental Test, 5 Jun 2018, paconsult GmbH, Environmental Testing Laboratory, Revision: -, Pages: 32

Drawing No. Plastics_Datasheet_middel_and_botoom_Housing_MS132-K_Wellamid 6600-PA66-GV20 HWV0CP, UL Certification No. E63957- Datasheet Middel & Botoom Housing MS132-K_Wellamid 6600-PA66-GV20

HWV0C, Revision: -, Pages: 1

Drawing No. Push-in catalog 1SBC100212C0201, MS132-K Manual Motor Starters with Push-in Spring Terminals, Revision: -, Pages: 7

Drawing No. Thermal_Tripping_TT2018011, Test Protocol- Thermal Tripping Test, Revision: -, Pages: 1

Terms of Validity:

This Product Design Assessment (PDA) Certificate remains valid until 28/May/2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

STANDARDS**ABS Rules:**

2019 ABS Steel Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/1.7, 4-8-3/1.11.1, 4-8-3/1.17, 4-8-3/5.3.3, 4-8-3/5.7.1, 4-8-3/5.7.2, 4-9-8/13.1

2019 ABS Marine Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-3/1.7, 4-8-3/1.11.1, 4-8-3/1.17, 4-8-3/5.3.3, 4-8-3/5.7.1, 4-8-3/5.7.2, 4-9-9/13.1

2019 ABS Mobile Offshore Drilling Units Rules 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-3-1/11, 4-3-1/15, 4-3-1/17, 6-1-7/9.15.1, 6-1-7/9.15.2

2019 ABS Mobile Offshore Units Rules 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-3-1/11, 4-3-1/15, 4-3-1/17, 6-1-7/9.15.1, 6-1-7/9.15.2

National:

NA

International:

IEC/EN 60947-2 Ed. 5.0 (2016)

IEC/EN 60947-5-1 Ed. 4 (2018)

Government:

NA

ABB XINHUI LOW VOLTAGE SWITCHGEAR COMPANY LTD

NO. 9, NORTH SANHE ROAD

XINHUI DISTRICT

JIANGMEN CITY GUANGDONG PROVINCE

China 529100

Telephone: +86 750 633 4646

Fax: + 86 750 667 7526

Email: donna-qiuhong.dong@cn.abb.com

Web: <http://www.abb.com.cn>

Tier: 5 - Unit Certification Required



EUMED:

NA

OTHERS:

NA